# Telecommunications Asia/Pacific 1988-1993

## Changing Users in a Changing Environment

Alex Graham
Principal Consultant
INPUT

© 1989 by INPUT. Reproduction Prohibited.

# Project Purpose

Comprehensive Assessment
- Key Technology Trends
- User Requirements

Identify Driving Forces

Identify Key Issues and Concerns

Project Requirements Five Years

INPUT

Notes:

MSEM-AG2-1

© 1989 by INPUT. Reproduction Prohibited.

# Project Scope/Methodology

Comprehensive User Survey
- 25 US-Based
- 30 In-Country

Structured Provider Survey
11 Countries

Objective and Subjective Questions

INPUT

Notes:

MSEM-AG2-2

© 1989 by INPUT. Reproduction Prohibited.

# Organization Profile

Corporate Telecommunications Budget

- Average $25 million
- High $100 million
- Low $1 million

Portion International

- 24%

INPUT

Notes:

MSEM-AG2-4a

© 1989 by INPUT. Reproduction Prohibited.

## Organization Profile

Personnel Costs

- 4% Total
- 6% International

Expenditure by Service Type

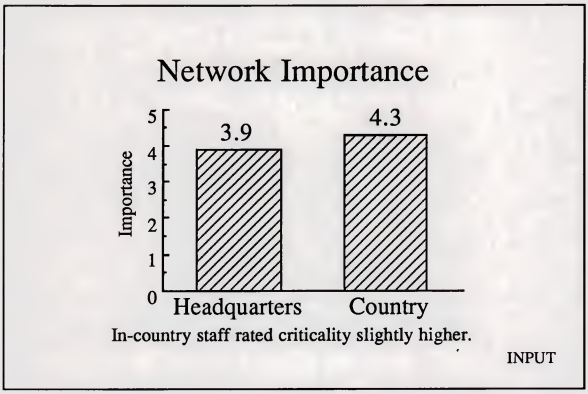
- 80% Leased Circuit
- 12% Value-Added Services
- 7% Packet Network (Transport)

INPUT

Notes:

MSEM-AG2-4b

© 1989 by INPUT. Reproduction Prohibited.

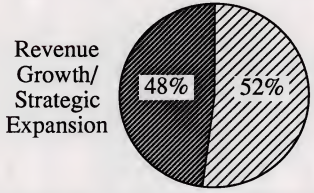



Notes:

MSEM-AG2-5

© 1989 by INPUT. Reproduction Prohibited.

# Primary Network Reason
# Headquarters Perspective



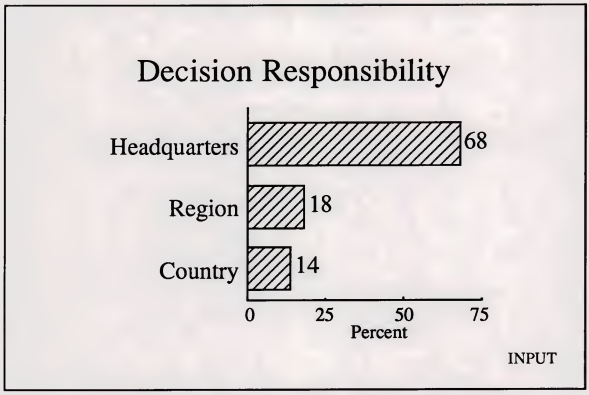

Less than half of headquarters staffs consider network as competitive tool.

INPUT

Notes:

MSEM-AG2-6

© 1989 by INPUT. Reproduction Prohibited.

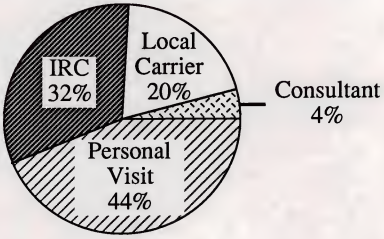



Notes:

MSEM-AG2-7

© 1989 by INPUT. Reproduction Prohibited.

## Decision Information Sources

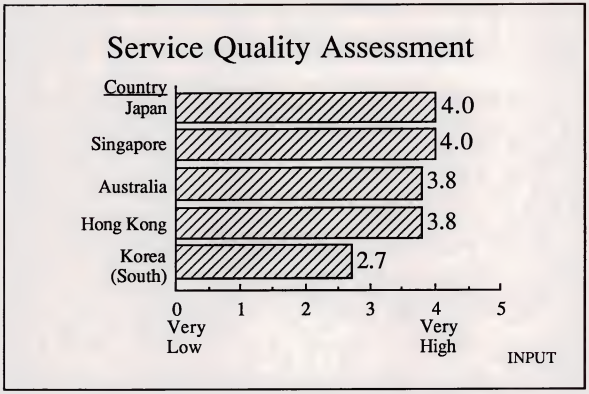



INPUT

Notes:

MSEM-AG2-8

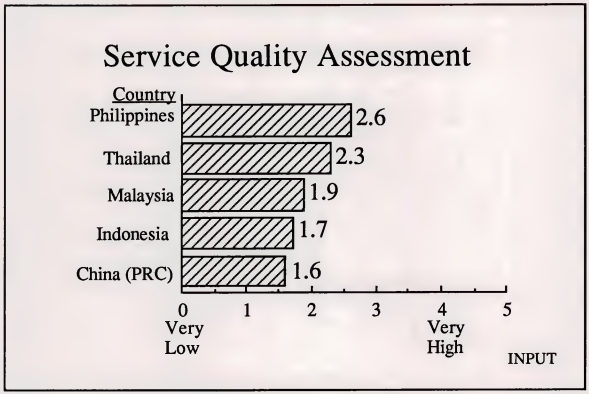
© 1989 by INPUT. Reproduction Prohibited.




Notes:

MSEM-AG2-9

© 1989 by INPUT. Reproduction Prohibited.




Notes:

MSEM-AG2-10

© 1989 by INPUT. Reproduction Prohibited.

# Service Development and Trends—Voice Services

## Basic Services—A Continued Need

- China
- Indonesia
- Malaysia
- Philippines
- Thailand

INPUT

Notes:

MSEM-AG2-11

© 1989 by INPUT. Reproduction Prohibited.

# Service Development and Trends—Voice Services

Rural Areas Generally Lacking
- Key Development Focus

International Better Than Domestic
- Trend toward Separate Networks

Average Five-Year Growth—50%
- Fax Is Key Contributor
- Fax Projected Growth—68%

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

# Service Development and Trends—Text Services

Telex Is Key Service

Slowly Being Replaced by
- Fax
- E-Mail

INPUT

Notes:

MSEM-AG2-13

© 1989 by INPUT. Reproduction Prohibited.

## Leased Circuit Services
## Primary Circuit Type

| | 1988 | 1993 | Change |
|---|---|---|---|
| No. Circuits | 12 | 11 | nil |
| | Percent | | |
| Telex Grade | 4 | 7 | nil |
| Voice-Grade (AVD) | 78 | 50 | (36) |
| Wideband (IBS) | 18 | 43 | 1.38 |

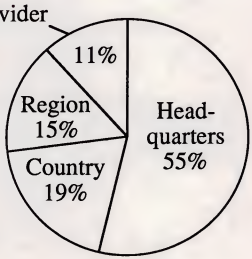
INPUT

Notes:

MSEM-AG2-14

© 1989 by INPUT. Reproduction Prohibited.

## Network Management Staff Location



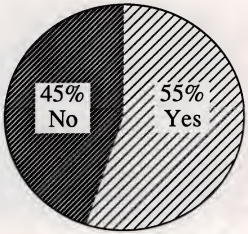

INPUT

Notes:

MSEM-AG2-15

© 1989 by INPUT. Reproduction Prohibited.

# Network Management
# Managed Network Consideration

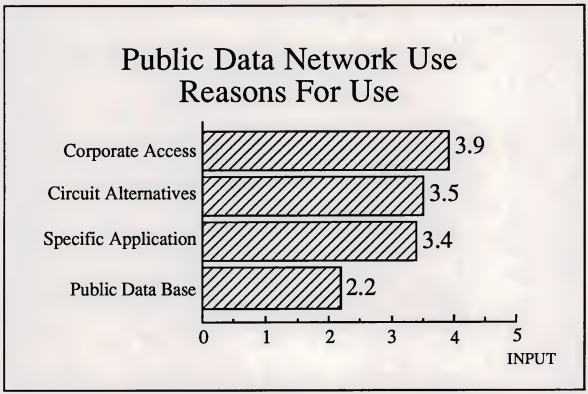



INPUT

Notes:

MSEM-AG2-16

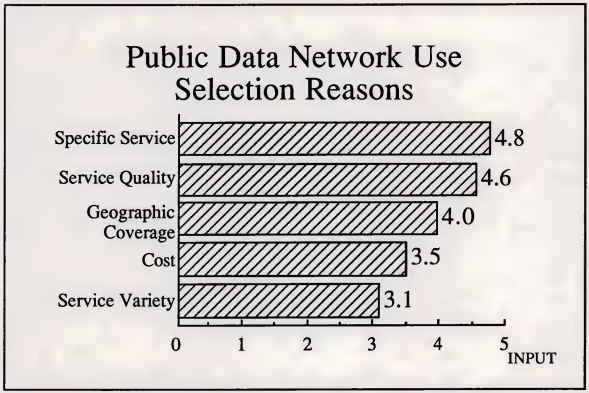
© 1989 by INPUT. Reproduction Prohibited.




Notes:

MSEM-AG2-17

© 1989 by INPUT. Reproduction Prohibited.




Notes:

MSEM-AG2-18

© 1989 by INPUT. Reproduction Prohibited.

# Public Data/Value-Added Networks

Public Network Services Growing
- Prominent in All Countries

Five-Year Growth Projections Include
- 52% for Transport Services
- 44% for Value-Added Services

INPUT

Notes:

MSEM-AG2-19

© 1989 by INPUT. Reproduction Prohibited.

# Public Data/Value-Added Networks

Key Value-Added Network Service Requirements

- Network Connectivity
- E-Mail
- EDI

INPUT

Notes:

MSEM-AG2-20

© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations

## Key Conclusions

Overall Growth Is Substantial
- Should Continue for Several Years

Projected Growth for Region
- 25-30% Overall
- 50-75% Selected Areas

INPUT

Notes:

MSEM-AG2-21

© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations

## Key Conclusions

Service Delivery Focus Shifting

- Pure Capacity Declining
- Added Value Increasing

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations

## Key Conclusions

Key User Needs Include:

- Domestic Services
- Universal Connectivity
- Enhanced E-Mail
- EDI
- Tariff Reductions
- Ease Policy Restrictions

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations

Key Growth Opportunities

- E-Mail
- EDI
- Fax Services (Store-Forward)
- Virtual Networks

INPUT

Notes:

MSEM-AG2-24

© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations

Users' Needs Are Key to Growth

- Needs Not Known
- Identification Needed
- Lobbying Needed

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations

## Users Recommendations

Make Service Requirements Known

- Identify
- Quantify
- Lobby

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations
# User Recommendations

Build Relationships
- More Frequent Contact
- Identify Problems
- Identify Successes

Plan for Service Environment
- Increased Public Network Use
- Increased Value-Added Services

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

## Conclusions and Recommendations
## Vendor Recommendations

Identify Primary Needs

- Basic Value-Added Needs Satisfied
- Enhanced Value-Added Services Needed

Position to Meet Growth Needs/Areas

- Expect Long Growth Cycles
- Relationships Most Important

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

# Conclusions and Recommendations

## Vendor Recommendations

Technology Transfer Important
- Be Prepared to Educate
- Build Domestic/International Linkage

Promote Full-Service Capability

INPUT

Notes:



© 1989 by INPUT. Reproduction Prohibited.

Alex Graham
Principal Consultant
INPUT

Alex Graham, a principal consultant, brings to INPUT more than 20 years of senior management experience in voice and data planning, network management planning, systems development, consulting, and marketing of telecommunications services. Additionally, he has wide-ranging experience in telecommunications, strategic planning, and development of customer support programs. He has been general manager of an international research and consulting firm, a senior consultant with Arthur D. Little, and a general manager for VISA International.

He holds an M.A. in international management from the American Graduate School and a B.A. in business from Grove City College.